EXPRESS MAIL NO. EV 339769045 US

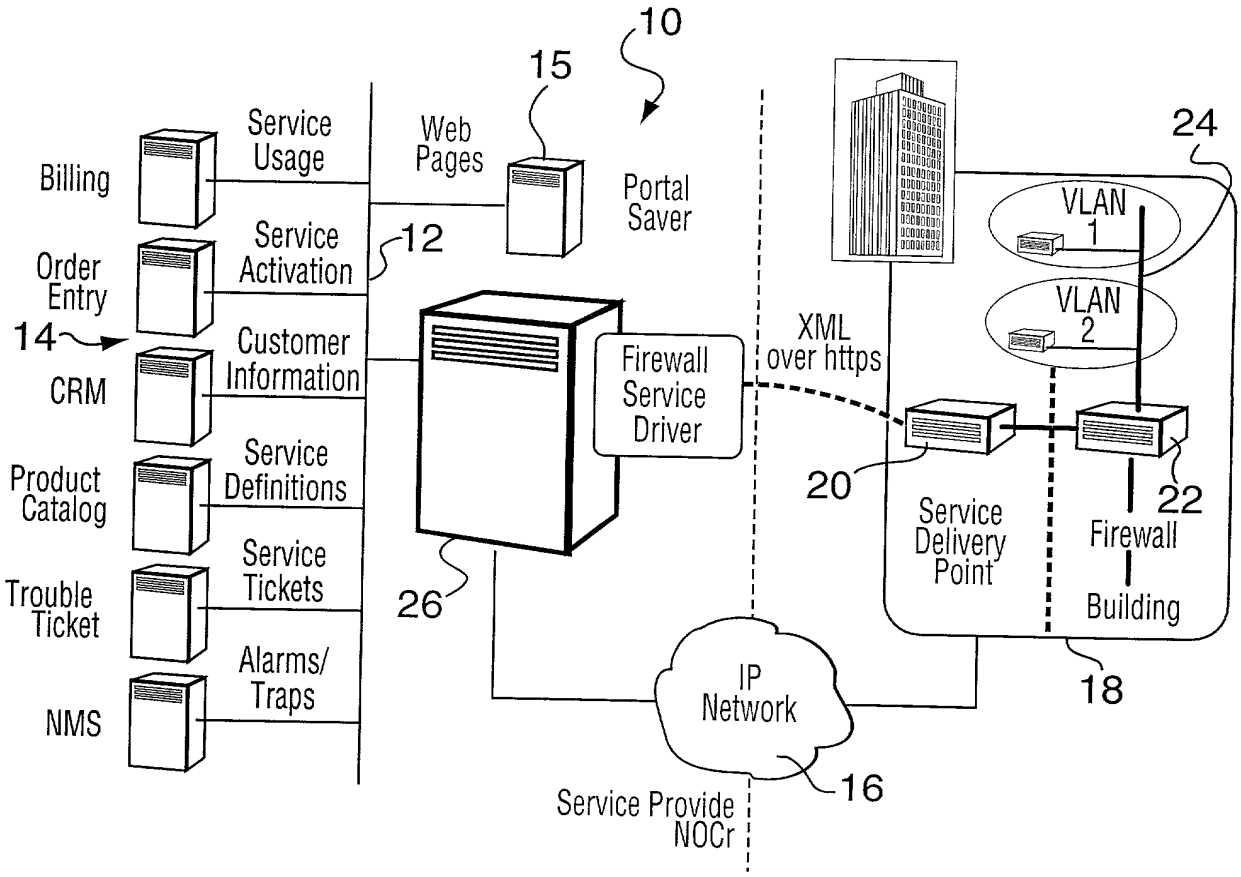

FIG.1

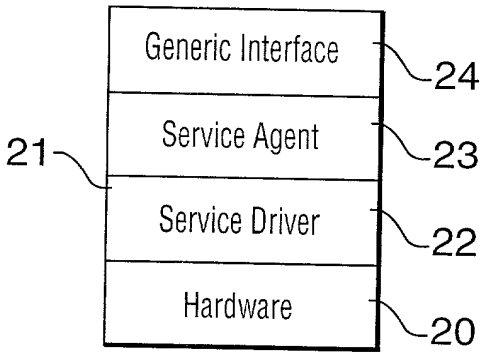

FIG.2

Express Mail No. EV 339 076 705 US

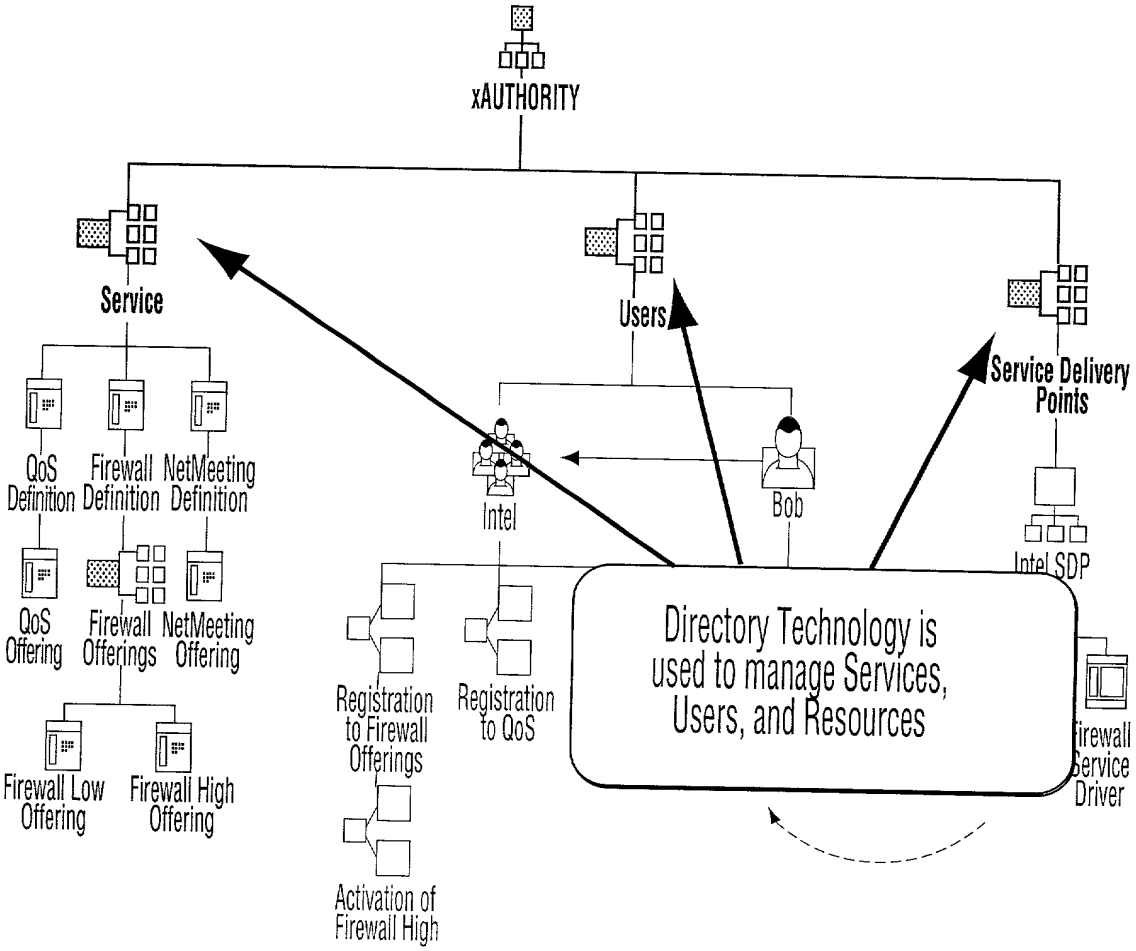

FIG. 3

XML Document: Configuration (1) XML

```
<configuration:document xmins:configuration="http://www.atreus-systems.com/TR/WD-service">
  <rule priority=0 direction="input" default="accept" id="setup(1)">
  <rule priority=0 direction=forward" default="deny" id="setup(1)">
  <rule priority=0 direction="output" default="accept" masquerade="false"id="activation(1)">
  <rule priority=1 direction="forward" s="64.154.202.227/32" d="0.0.0.0/0"port="any " id="activation(1)">
</configuration:document>
```

FIG. 4

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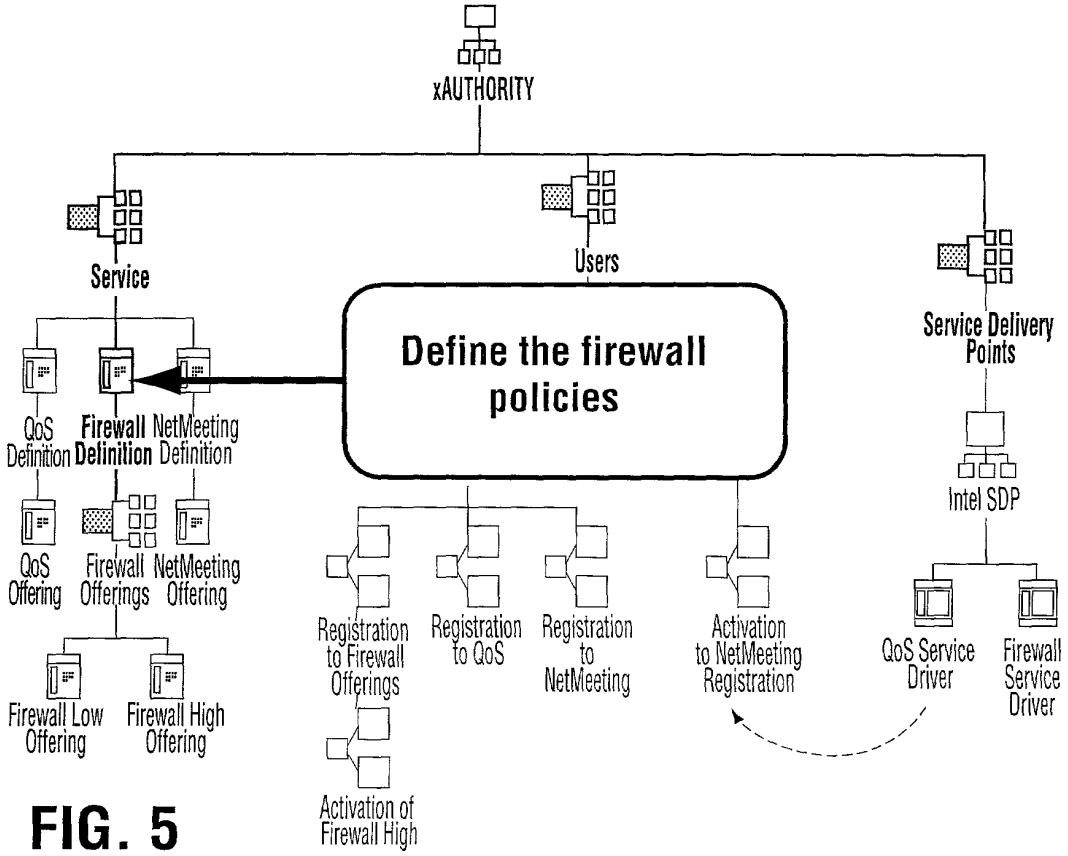


FIG. 5

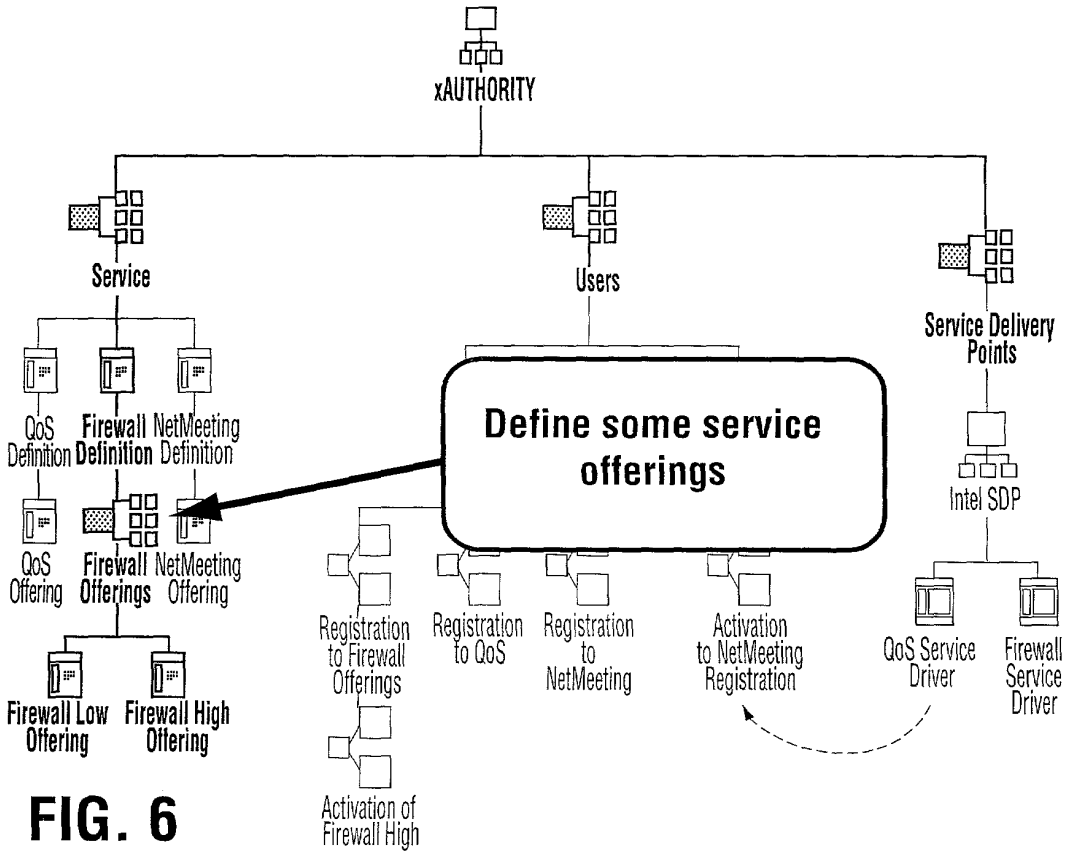


FIG. 6

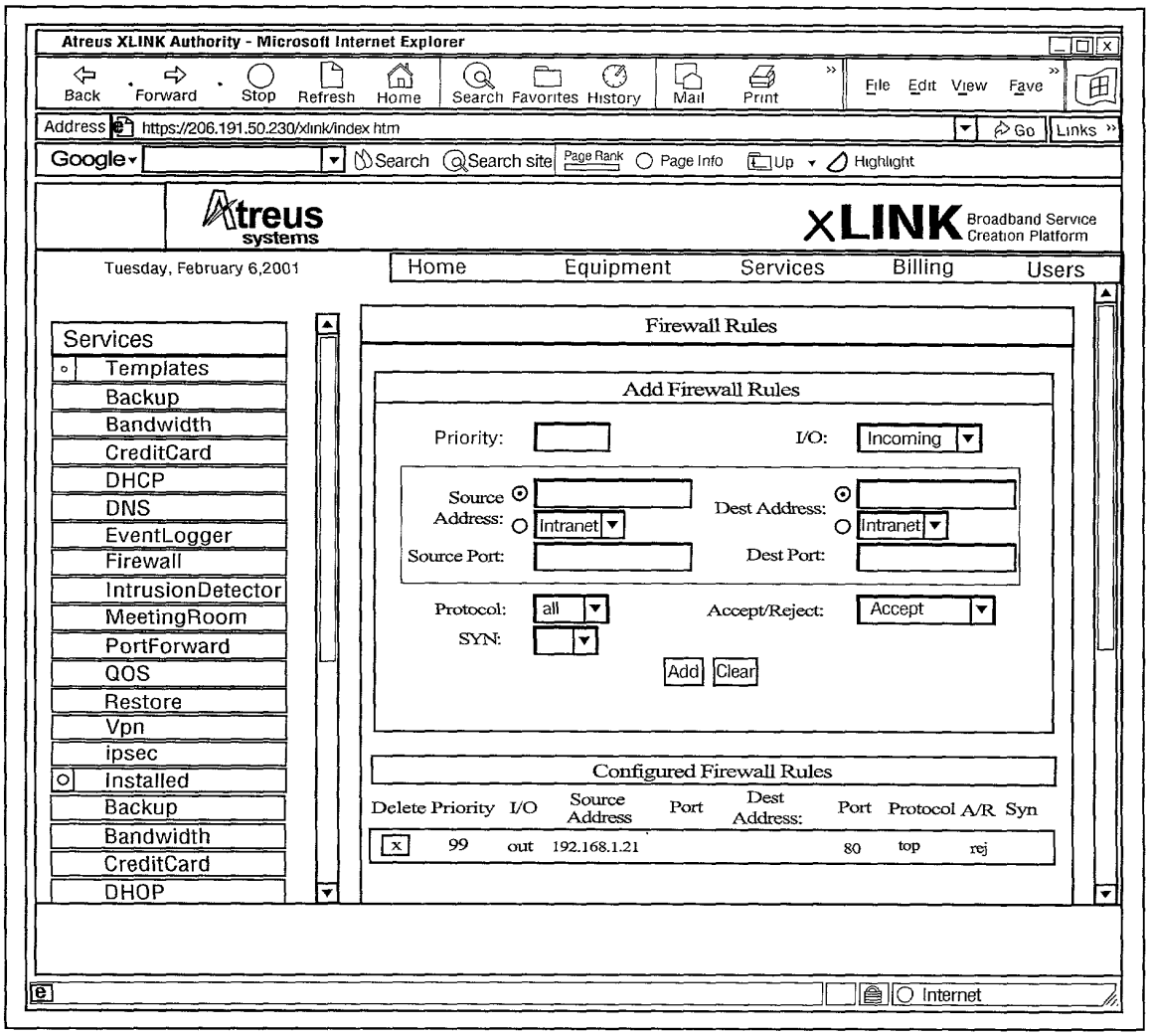

Atreus XLINK Authority - Microsoft Internet Explorer
Back
Forward
Stop
Refresh
Home
Search
Favorites
History
Mail
Print
File
Edit
View
Fave
Address
https://206.191.50.230/xlink/index.htm
Go
Links
Google
Search
Search site
Page Rank
Page Info
Up
Highlight
Atreus systems
XLINK Broadband Service Creation Platform
Tuesday, February 6,2001
Home
Equipment
Services
Billing
Users
Services
Templates
Backup
Bandwidth
CreditCard
DHCP
DNS
EventLogger
Firewall
IntrusionDetector
MeetingRoom
PortForward
QOS
Restore
Vpn
ipsec
Installed
Backup
Bandwidth
CreditCard
DHCP
Firewall Rules
Add Firewall Rules
Priority:
I/O:
Incoming
Source Address:
Intranet
Dest Address:
Intranet
Source Port:
Dest Port:
Protocol:
all
Accept/Reject:
Accept
SYN:
Add
Clear
Configured Firewall Rules
Delete
Priority
I/O
Source Address
Port
Dest Address:
Port
Protocol
A/R
Syn
x
99
out
192.168.1.21
80
top
rej
Internet

FIG.7

Patent Application Publication

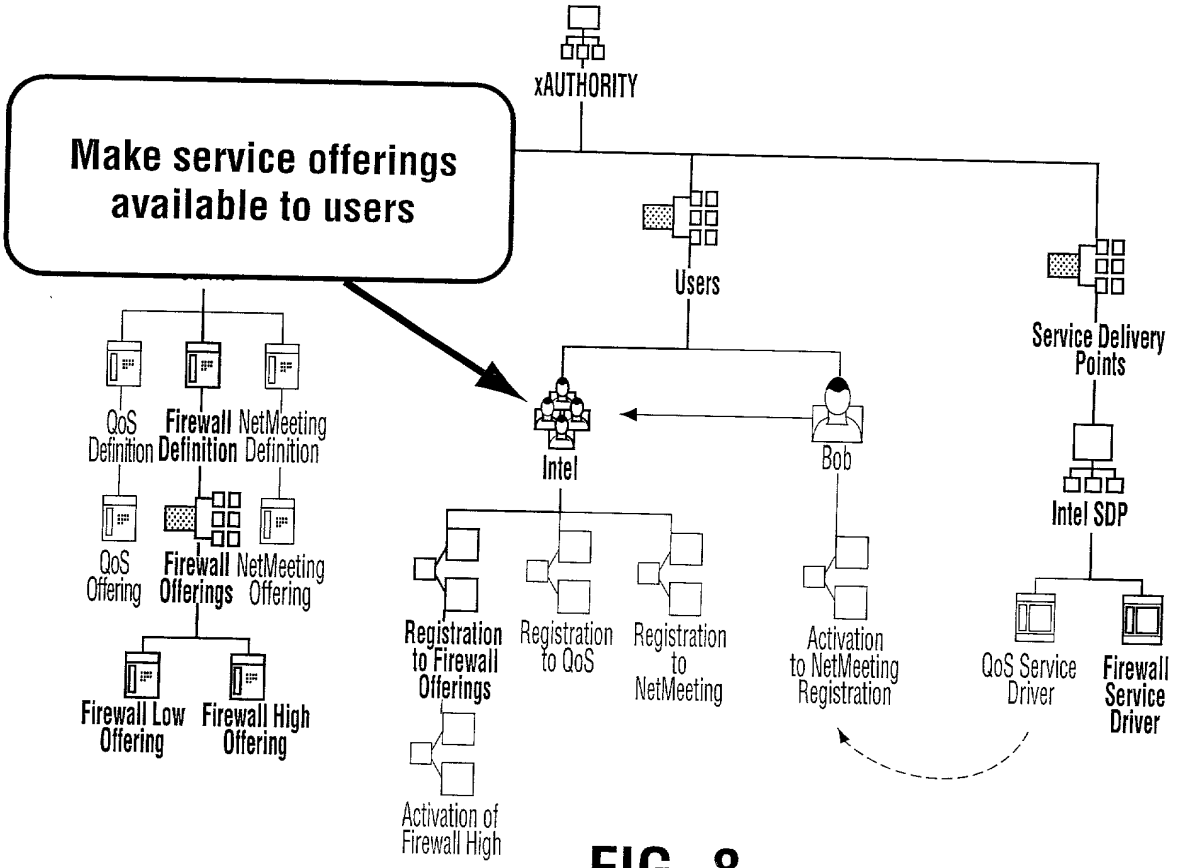


FIG. 8

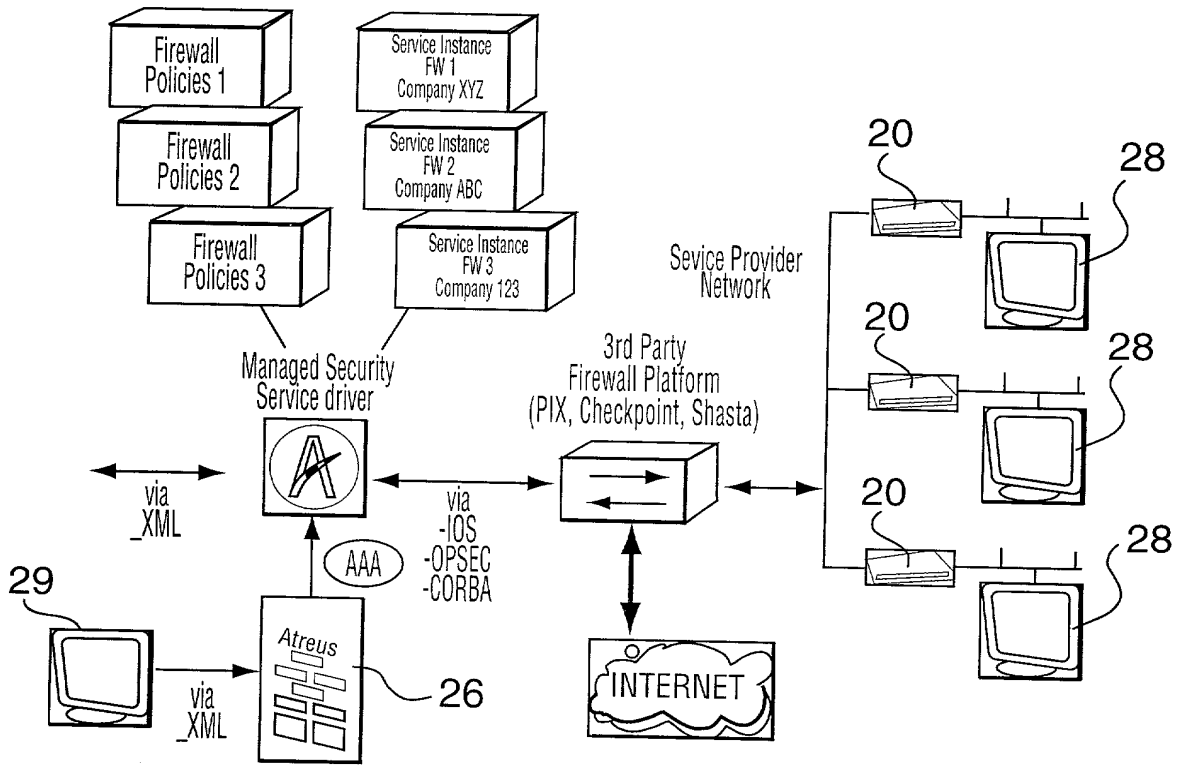


FIG. 9

XML Document: Registration (1) XML

```
<registration:document xmins:registration="http://www.atreus-systems.com/TR/WD-service">
 <activation:document xmins:activation="http://www.atreus-systems.com/TR/WD-service">
 <registration:variable name="address" from="portal">
 <registration:variable name="user" from="portal">
 <registration:variable name="firewall" from="LDAP">
  <rule scope="$user" name="firewall" find="association">
 </registration:variable >
 <registration:variable name="qos" from="LDAP">
  <rule scope="$user" name="qos" find="association">
 </registration:variable >
 <registration:policy name="$firewall" method="activate" id="$self" >
 <rule priority=1 direction="forward" s="$subscriber/32" d="0.0.0.0" port="any....>
 </registration:policy >
 <registration:policy name="Sqos" method="activate" id="$self">
  <rule address="$subscriber" qos="gold">
 </registration:policy >
 <registration:policy name="cn=billing,..." method="journal" id="$self" >
  <rule customer="$user" service="NetMeeting">
 </registration:policy >
 </activation:document >
</registration:document >
```

FIG. 10

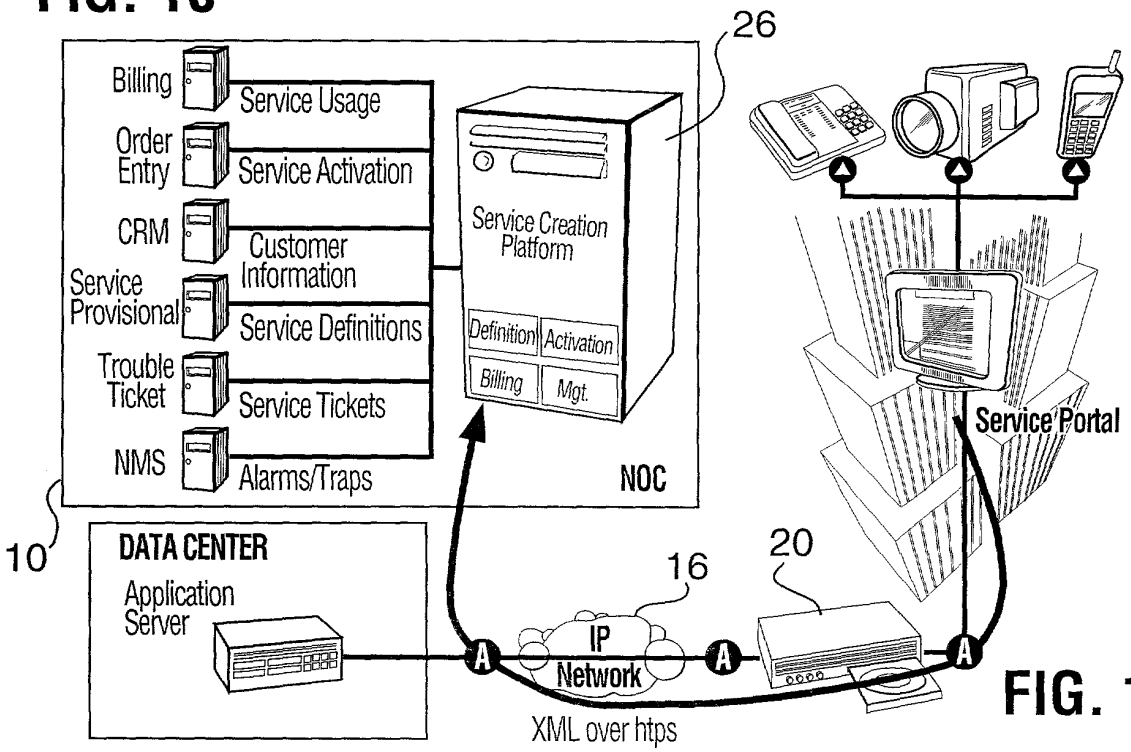


FIG. 11

Document ID: US 2003/0035408 A1

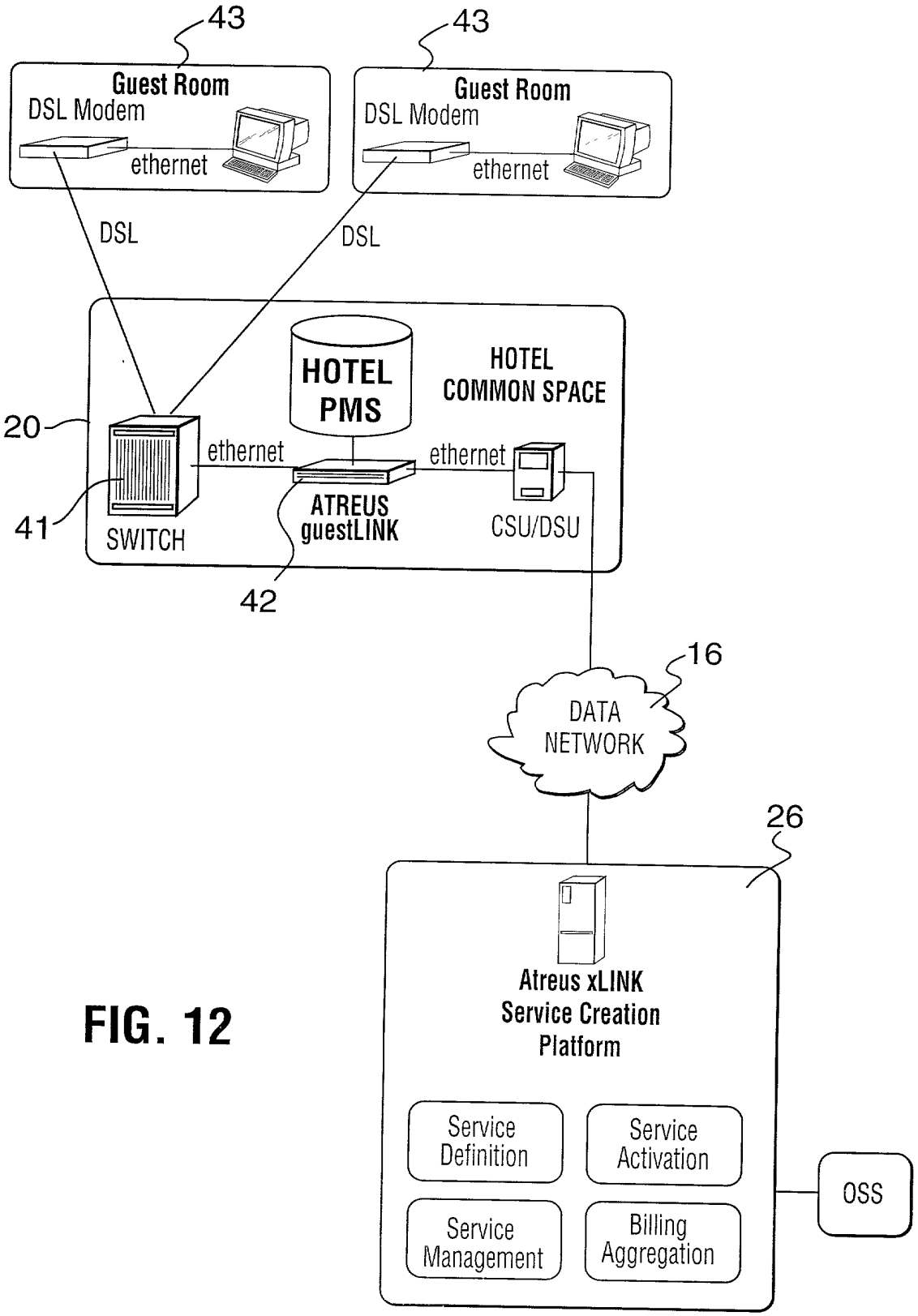


FIG. 12

TD2060"80259860

xLINK Directory Tree: NetMeeting Example

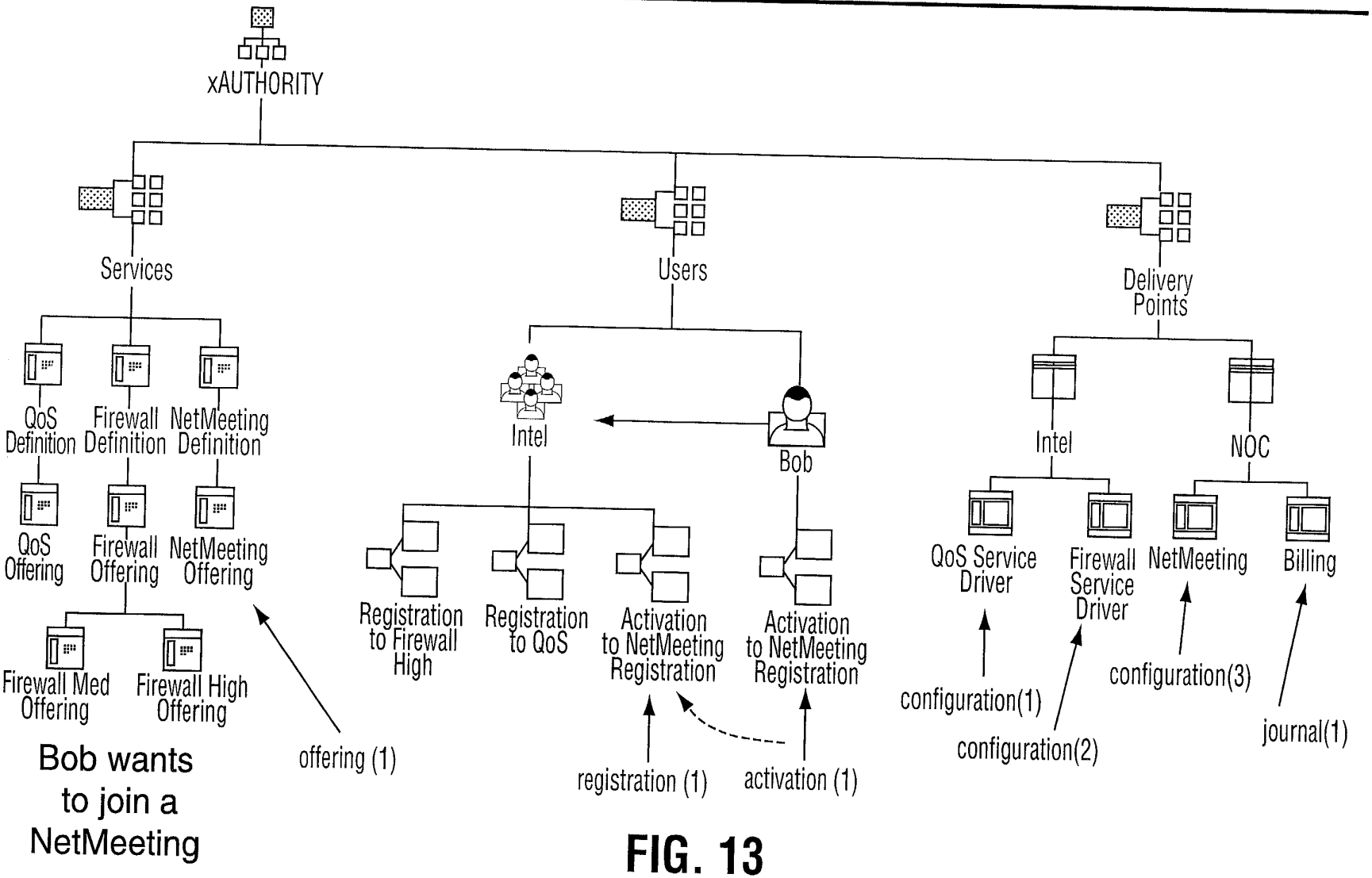


FIG. 13

xLINK Directory Tree: Services

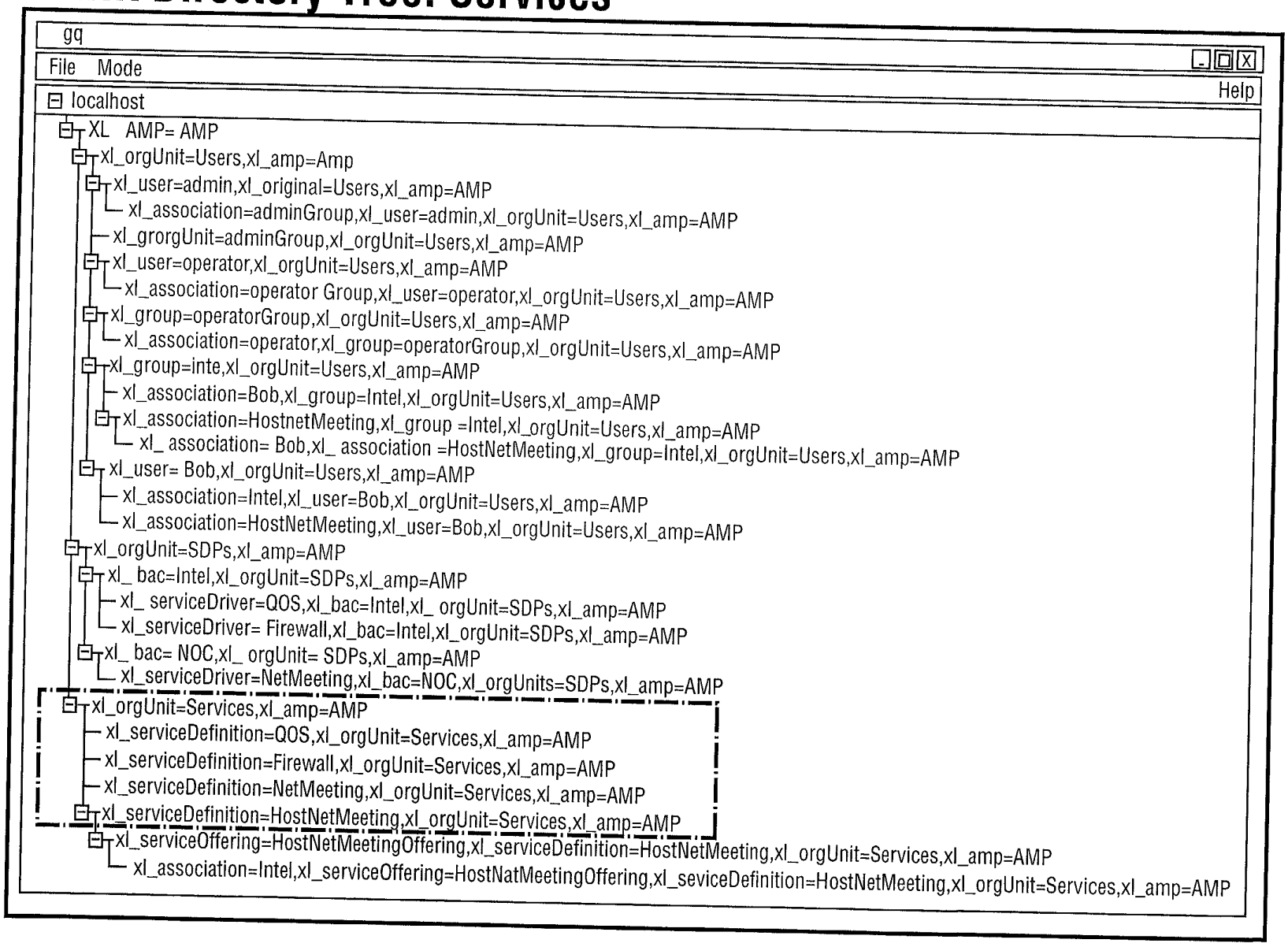


FIG. 14

xLINK Directory Tree: Users

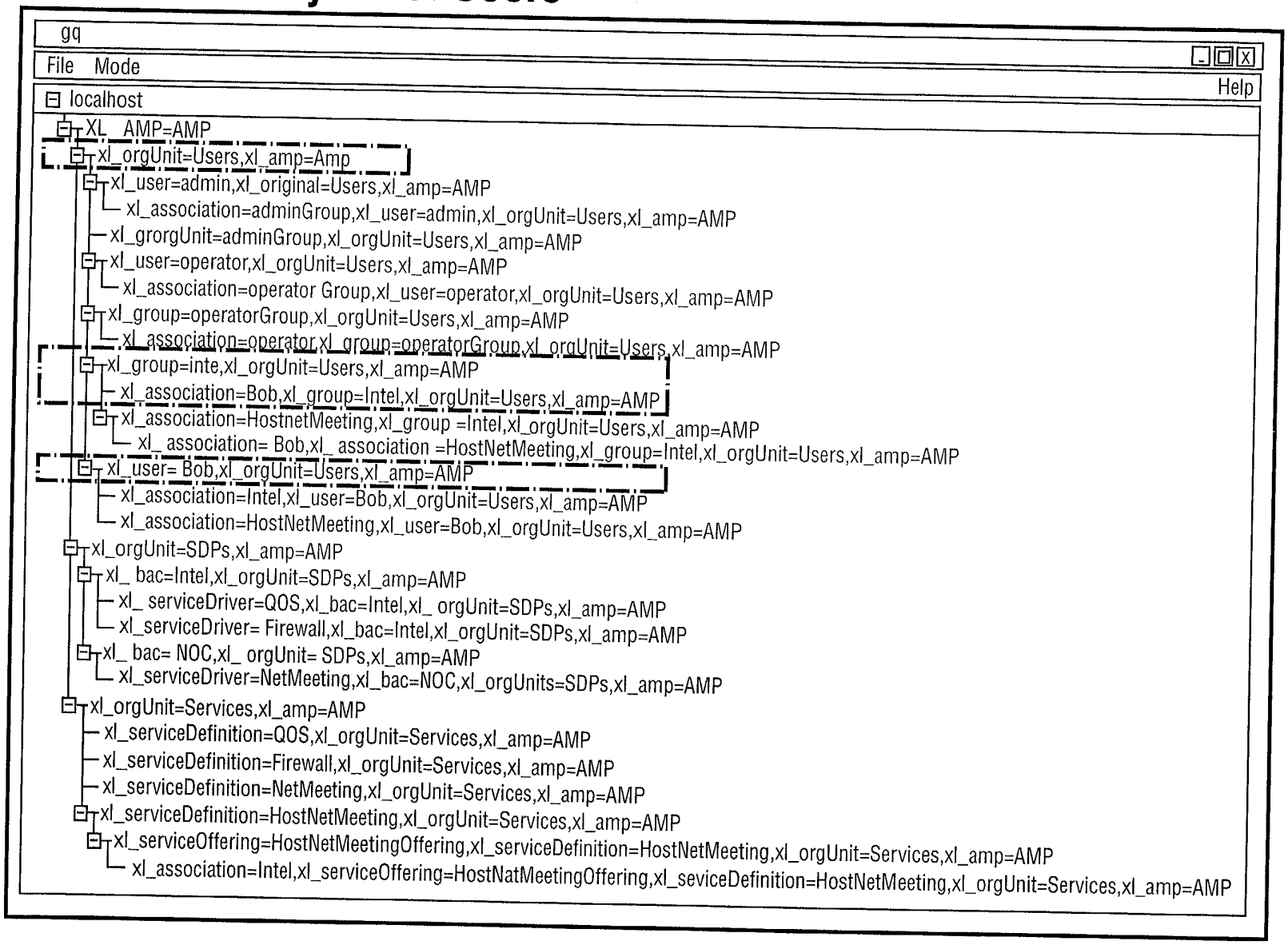


FIG. 15

xLINK Directory Tree: Delivery Points

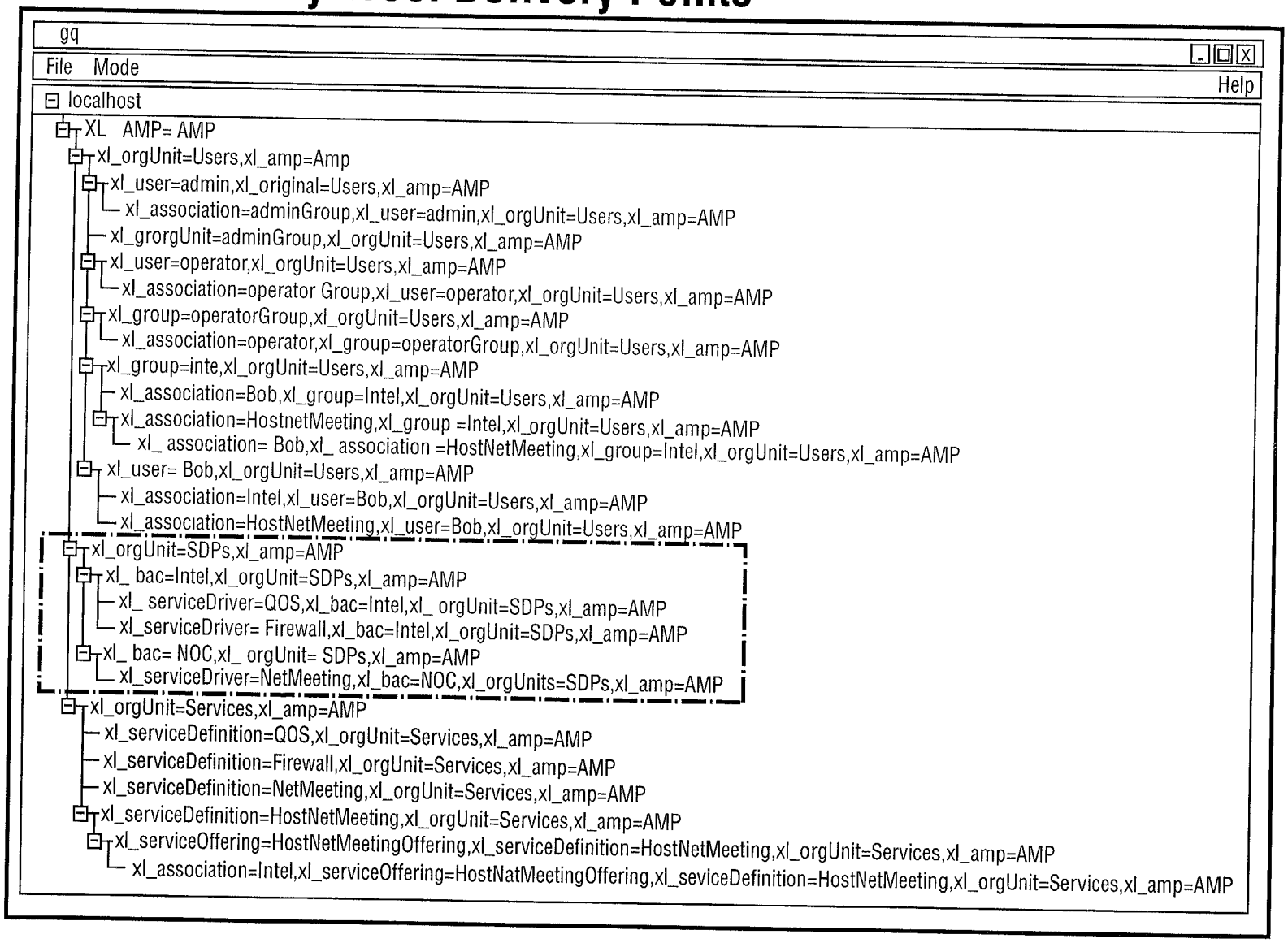
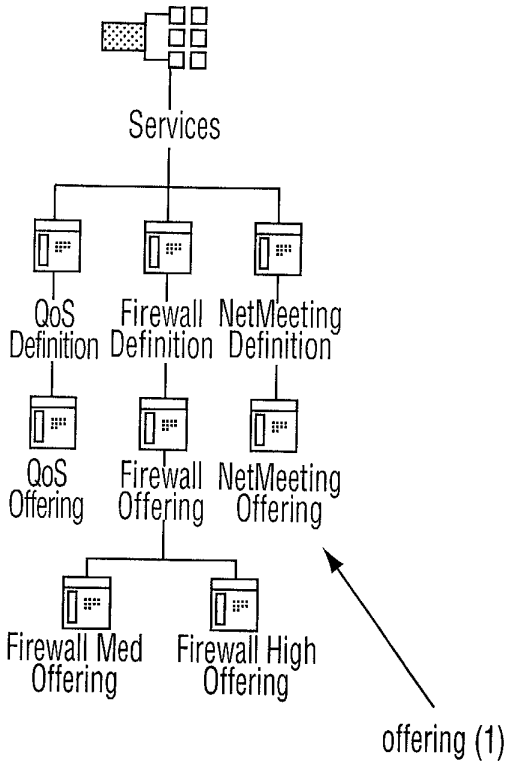


FIG. 16

Define Service Offering



XML Document: Offering (1)

```
<offering:document xmins:offering="http://www.atreus-systems.com/TR/WD-service">
 <registration:document xmins:registration="http://www.atreus-systems.com/TR/WD-service">
 <activation:document xmins:activation="http://www.atreus-systems.com/TR/WD-service">
 <registration:variable name="address" from="portal">
 <registration:variable name="user" from="portal">
 <registration:variable name="firewall" from="LDAP">
    <rule scope="$user" name="firewall" find="association">
 </registration:variable >
 <registration:variable name="qos" from="LDAP">
    <rule scope="$user" name="qos" find="association">
 </registration:variable >
 <registration:policy name="$firewall" method="activate" id="$self" >
<rule priority=1 direction="forward" s="$subscriber/32" d="0.0.0.0" port="any....>
 </registration:policy >
<registration:policy name="Sqos" method="activate" id="$self">
   <rule address="$subscriber" qos="gold">
 </registration:policy >
 <registration:policy name="cn=billing,..." method="journal" id="$self" >
    <rule customer="$user" service="NetMeeting">
 </registration:policy >
 </activation:document >
</offering:document >
```

FIG. 17

T07060"80725860

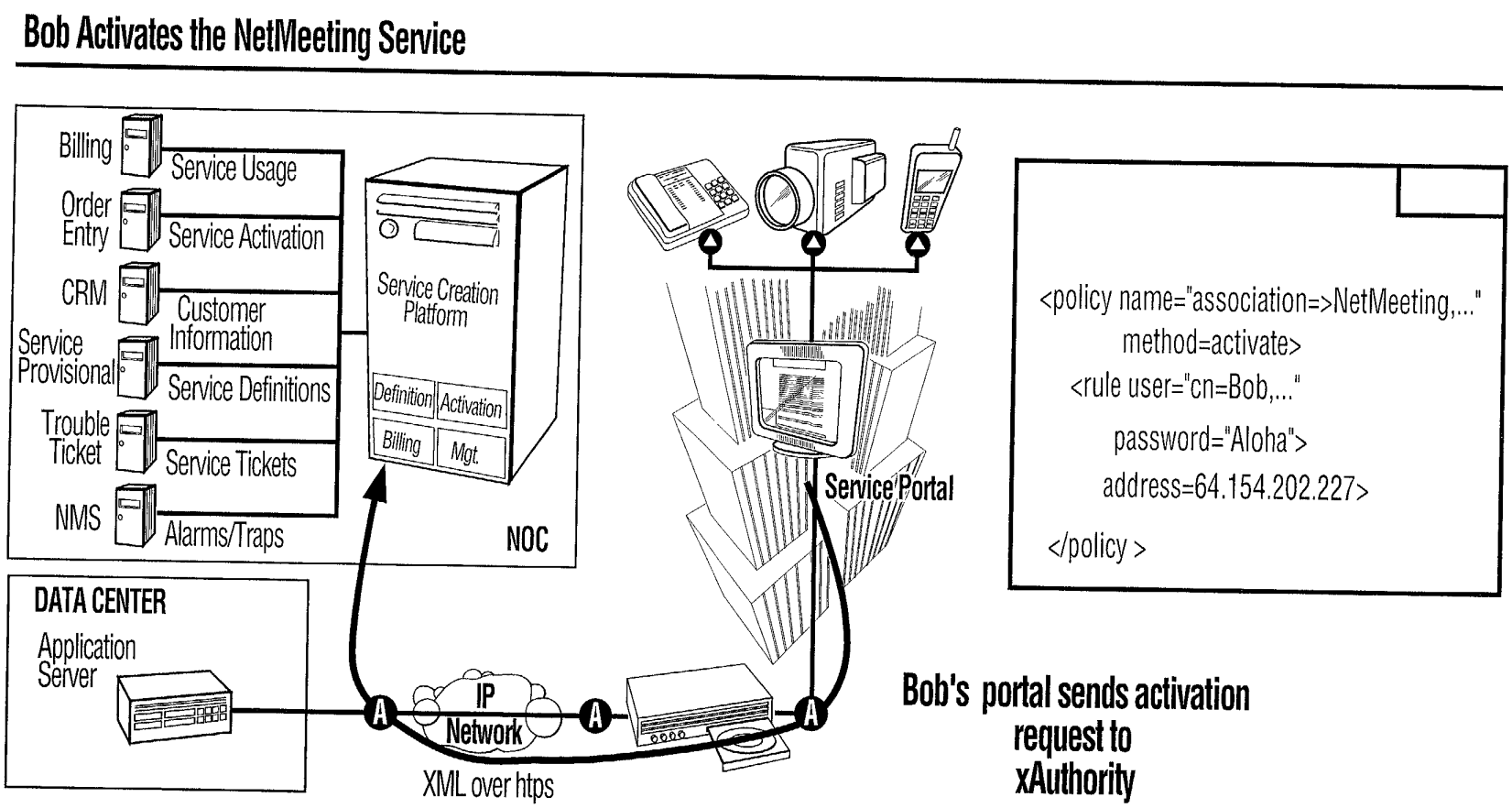
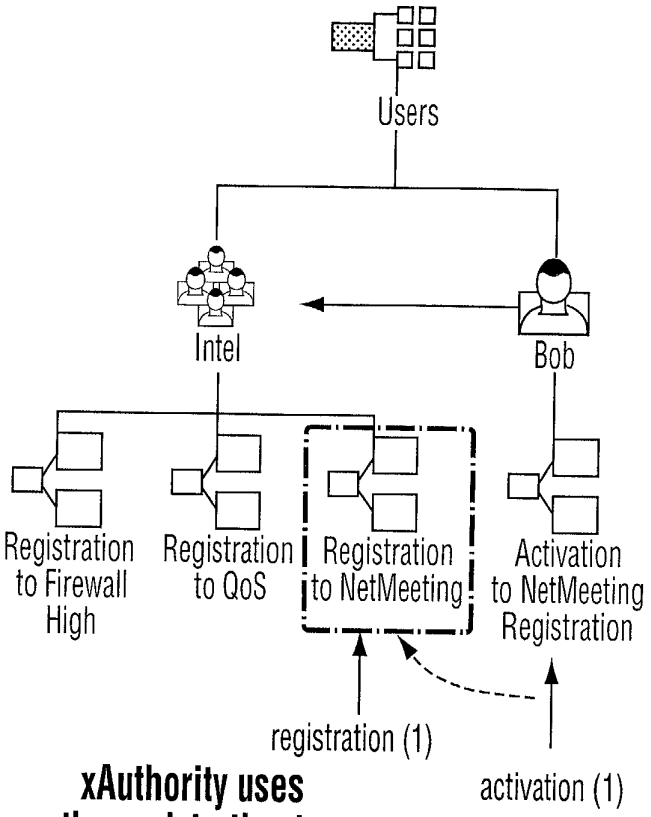


FIG. 18

Activate NetMeeting Registration Policy



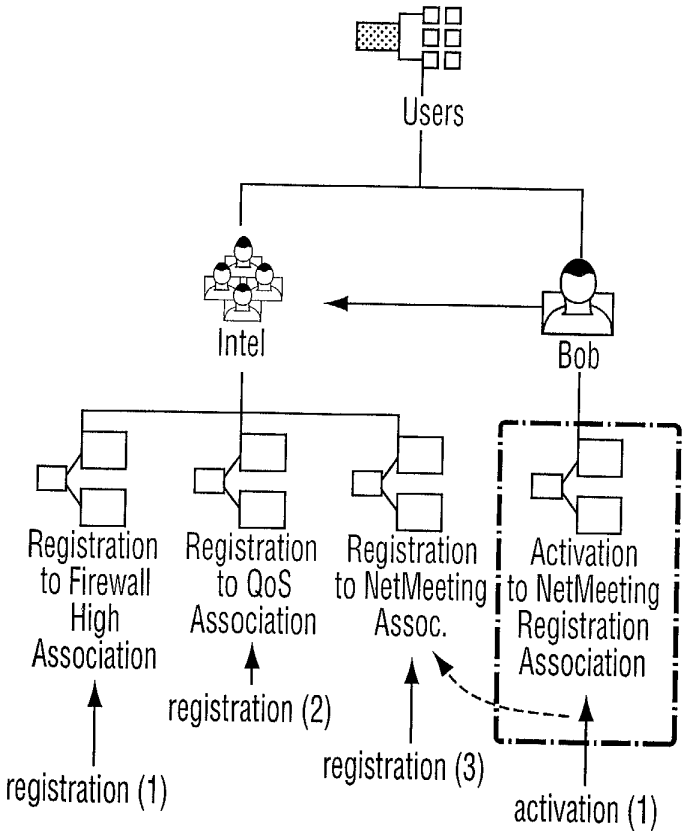
xAuthority uses the registration to complete an activation document for Bob

XML Document: Registration (1)

```
<registration:document xmins:offering="http://www.atreus-systems.com/TR/WD-service">
  <activation:document xmins:registration="http://www.atreus-systems.com/TR/WD-service">
  <registration:variable name="address" from="portal">
  <registration:variable name="user" from="portal">
  <registration:variable name="firewall" from="LDAP">
    <rule scope="$user" name="firewall" find="association">
  </registration:variable >
  <registration:variable name="qos" from="LDAP">
    <rule scope="$user" name="qos" find="association">
  </registration:variable >
  <registration:policy name="$firewall" method="activate" id="$self" >
  <rule priority=1 direction="forward" s="$subscriber/32" d="0.0.0.0" port="any....>
  </registration:policy >
  <registration:policy name="Sqos" method="activate" id="$self">
    <rule address="$subscriber" qos="gold">
  </registration:policy >
  <registration:policy name="cn=billing,..." method="journal" id="$self" >
    <rule customer="$user" service="NetMeeting">
  </registration:policy >
  </activation:document >
</registration:document >
```

FIG. 19

NetMeeting Activation Policy



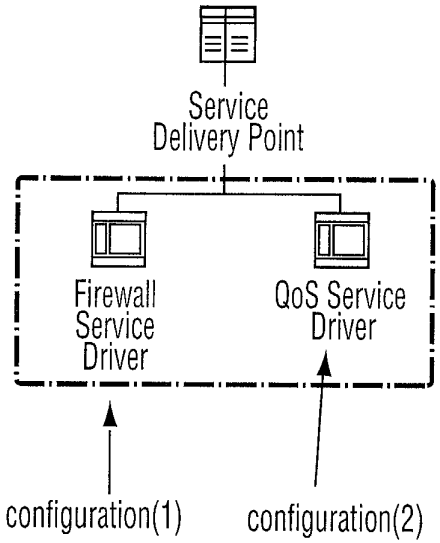
XML Document: Activation (1)

```
<activation:document xmins:activation="http://www.atreus-systems.com/TR/WD-service">
  <activation:policy dn="cn=Chicago,..." method="activate" id="activation(1)">
    <rule priority=1 direction="forward" s="64.154.202.227/32" d="0.0.0.0" port="any....>
  </activation:policy >
  <activation:policy dn="cn=Chicago,..." method="activate" id="activation(1)">
    <rule address="64.154.202.227" qos="gold">
  </activation:policy >
  <activation:policy name ="cn=billing,..." method="journal" id="activation(1)">
    <rule customer="dn=>cn=Bob,..." service="NetMeeting">
  </activation:policy >
</activation:document >
```

xAuthority keeps a record of Bobs activation policy

FIG. 20

Service Driver Configuration



XML Document:Configuration (1)

```
<configuration:document xmins:activation="http://www.atreus-systems.com/TR/WD-service">
  <rule priority=0 direction="input" default="accept" id="setup(1)">
  <rule priority=0 direction="forward" default="deny" id="setup(1)">
  <rule priority=0 direction="output" default="accept" masquerade="false" id=setup(1)">
  <rule priority=1 direction="forward" s="64.154.202.227/32" d="0.0.0.0/0" port="any" id="activation(1)">
</configuration:document >
```

XML Document:Configuration (2)

```
<configuration:document xmins:activation="http://www.atreus-systems.com/TR/WD-service">
  <service qos="gold" cir="1500000" burst="20" id"setup(1)">
  <service qos="silver" cir="1000000" burst="20" id"setup(1)">
  <service qos="bronze" cir="500000" burst="20" id"setup(1)">
  <rule address="64.154.202.227" qos="gold" id="activation(1)">
</configuration:document >
```

xAuthority maintains a complete service driver activation policy

FIG. 21

ServiceDriver Configuration

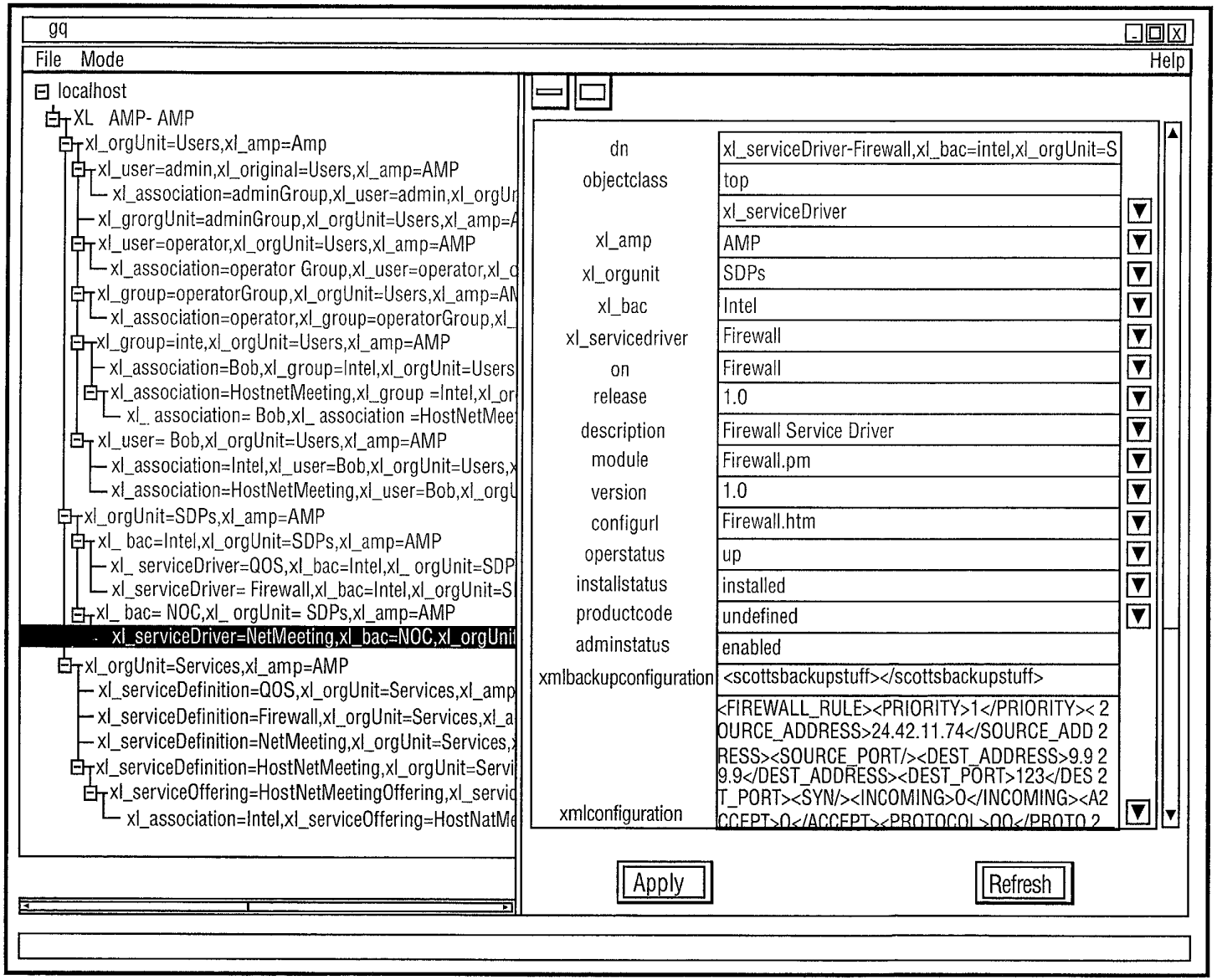


FIG. 22